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<p>(21) International Application Number: PCT/US99/20207 (22) International Filing Date: 2 September 1999 (02.09.99) (30) Priority Data: 60/099,068 3 September 1998 (03.09.98) US 60/135,835 24 May 1999 (24.05.99) US (71) Applicant (for all designated States except US): LOMA LINDA UNIVERSITY [US/US]; Loma Linda, CA 92350 (US). (72) Inventors; and (75) Inventors/Applicants (for US only): SZALAY, Aladar, A. [US/US]; 7327 Fairwood Lane, Highland, CA 92346 (US). WANG, Yubao [CN/US]; 24931 Prospect Avenue, Loma Linda, CA 92354 (US). WANG-PRUSKI, Gefu [CA/CA]; 114 Hillcrest Avenue, Truro, Nova Scotia B2N 4L3 (CA). (74) Agents: SHELDON, Jeffrey, G. et al.; Sheldon & Mak, 9th floor, 225 South Lake Avenue, Pasadena, CA 91101 (US).</p>		<p>(81) Designated States: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).</p> <p>Published <i>With international search report.</i></p>
<p>(54) Title: <u>METHOD FOR STUDYING PROTEIN INTERACTIONS IN VIVO</u> (57) Abstract A method for determining whether a first protein interacts with a second protein within a living cell. The method comprises providing the first protein complexed to a donor luciferase and the second protein complexed to an acceptor fluorophore within the cell. The complexed first protein and the complexed second protein are allowed to come into proximity to each other within the cell. Then, any fluorescence from the acceptor fluorophore resulting from luminescence resonance energy transfer from the donor luciferase is detected, where fluorescence from the acceptor fluorophore indicates that the first protein has interacted with the second protein.</p>		

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